

AMENDMENTS

In The Claims

Please cancel claims 1-44 without prejudice or disclaimer of the subject matter therein.

Please add new claims 45-82 as follows:

Claims 1-44 Cancelled

45. (New) An apparatus to hydrate and deliver a pledget substantially adjacent to a blood vessel puncture site, comprising:

a control tip including:

a vent tube having a tubular shaft with a proximal end having a hub, a distal end, and a lumen extending between the proximal end and the distal end;

a control head on the distal end of the vent tube, the control head including an externally tapered proximal end portion, a distal end portion having a distal port, and a central portion between the proximal end portion and the distal end portion, the control head including a lumen extending between the distal port to the vent tube shaft lumen;

a pledget pusher positioned around the vent tube shaft, the pledget pusher including a proximal end having a hub, a distal end having an enlarged portion, and a lumen extending longitudinally between the pledget pusher proximal end and the pledget pusher distal end, the inner diameter of the pledget pusher lumen being larger than the outer diameter of the vent tube;

a delivery cannula positioned around the pledget pusher, the delivery cannula

including a tubular shaft having a proximal end having a hub, a distal end, and a lumen extending longitudinally between the delivery cannula proximal end and the delivery cannula distal end, the inner diameter of the delivery cannula lumen being larger than the outer diameter of the pledget pusher; and

a pledget hydrating device having a fluid handling tube to receive the control head, the fluid handling tube including:

- a first end, a second end, and a lumen extending between said first end and said second end;

- at least one fluid port located at said first end; and

- an enlarged portion at said first end having a larger diameter than said fluid handling tube lumen,

wherein said fluid handling tube lumen extends over said distal port.

46. (New) The apparatus of claim 45 wherein the control head extends distally from the delivery cannula distal end, the delivery cannula distal end extends distally of the pledget pusher distal end.

47. (New) The apparatus of claim 45 further comprising a wire extending through the vent tube lumen, the wire having an outer diameter less than the vent tube lumen inner diameter.

48. (New) The apparatus of claim 45 further comprising a handle having a top portion having a first opening, said top portion coupled to a bottom portion having a second opening, a proximal end and a distal end, the handle and said control tip hub together further comprising a motion limiting device, portions of the motion limiting device being formed on the control tip hub, and portions of the motion limiting device being formed on the handle distal end, the motion limiting device limiting longitudinal motion of the pledget pusher relative to the handle over a distance X.

49. (New) The apparatus of claim 48 wherein the motion limiting device on the handle distal end comprises at least one releaseable locking ramp extending outwardly from said top portion, said at least one releaseable locking ramps located at the handle distal end.

50. The apparatus of claim 48 wherein said at least one releaseable locking ramp provides tactile feedback to a user to inform the user that the pledget pusher distal end is near the delivery cannula distal end.

51. (New) The apparatus of claim 50 wherein said pledget pusher hub further comprises a pledget pusher handle extending outwardly from said first and second openings, at least one distal latch extending radially inward from said pledget pusher handle to releasably lock with said at least one releaseable locking ramp, at least one proximal latch extending radially inward from the pledget pusher hub to releasably lock with a latch on said control tip hub, and a first guide stud and a second guide stud opposite said first guide stud to engage an inner surface of said handle.

52. (New) The apparatus of claim 50 wherein the pledget pusher is slidable in the delivery cannula between a distal position with the pledget pusher handle engaging the at least one releaseable locking ramps, and a proximal position with the pledget pusher proximal latch engaging the latch on said control tip hub.

53. (New) The apparatus of claim 48 further comprising a releasable locking hub at the handle distal end to mate with the delivery cannula hub.

54. (New) The apparatus of claim 45 further comprising a hydrating device comprising a proximal end, a distal end, an interior chamber, a tubular extension extending from the distal end, a stop adjacent the tubular extension, and a proximal opening, the tubular extension sized to receive the delivery cannula therein, the stop sized and configured to prevent the delivery cannula from entering the interior chamber and sized and configured to permit the pledget pusher and control head to pass into the interior chamber.

55. (New) The apparatus of claim 54 wherein said fluid handling tube is sized to fit within the interior chamber with the enlarged portion adjacent the pledget hydrating device proximal end.

56. (New) The apparatus of claim 45 wherein the delivery cannula further comprises a means for marking.

57. (New) The apparatus of claim 56 wherein the means for marking comprises a collar.
58. (New) The apparatus of claim 45 wherein the pledget pusher enlarged portion has a diameter substantially similar to the inner diameter of the delivery cannula lumen such that there is no space between the enlarged portion and the inner diameter of the delivery cannula lumen.
59. (New) The apparatus of claim 45 further comprising a flash tube at said control tip hub.
60. (New) The apparatus of claim 59 comprising a blood flow tube attached over said flash tube, said blood flow tube having a larger internal diameter than said flash tube.
61. (New) The apparatus of claim 60 wherein said blood flow tube further comprises a blood reservoir.
62. (New) The apparatus of claim 60 wherein said blood flow tube is a cone.
63. (New) The apparatus of claim 60 wherein said blood flow tube is hydrophobic and has a high surface tension to inhibit shunting of a blood flow out of said blood flow tube.
64. (New) The apparatus of claim 60 wherein said blood flow tube is angled at about 60 degrees from the horizontal.

65. (New) A method for hydrating a pledget in an hydrating device and positioning the pledget adjacent to the exterior surface of a blood vessel puncture site, comprising:

hydrating the pledget with a fluid from a fluid source;

retracting a pledget pusher in a delivery cannula to a proximal position;

pushing said pledget into said delivery cannula and adjacent said pledget pusher;

removing said hydrating device;

advancing a control head of a control tip through the puncture site and at least partially into the blood vessel, the control tip including a proximal portion extending out of the puncture site and out of the patient;

advancing an assembly over the control tip proximal portion and adjacent to an exterior surface of the blood vessel, the assembly including the delivery cannula, the pledget pusher in the delivery cannula, and the pledget in the delivery cannula;

proximally retracting the control head; and

expelling the pledget from the delivery cannula.

66. (New) The method of claim 65 comprising positioning the control head in a fluid handling tube in the hydrating device prior to hydrating the pledget.

67. (New) The method of claim 65 wherein retracting the pledget pusher further comprises mating a pledget pusher proximal latch with a control tip latch on a proximal end of the control tip.

68. (New) The method of claim 65 wherein said fluid source is a syringe.
69. (New) The method of claim 65 wherein expelling the pledget further comprises releasing said pledget pusher proximal latch from said control tip latch.
70. (New) A method in accordance with claim 65, wherein advancing the control head and advancing the assembly are performed simultaneously.
71. (New) A method in accordance with claim 65, wherein advancing the control head is performed before the step of advancing the assembly.
72. (New) A method in accordance with Claim 65, further comprising proximally retracting the delivery cannula and the control tip relative to the puncture site and relative to the pledget pusher.
73. (New) A method in accordance with Claim 70, further comprising proximally retracting the control tip relative to the puncture site and relative to the pledget pusher.
74. (New) A method in accordance with Claim 65, wherein expelling further comprises the step of distally advancing the pledget pusher to push the pledget out of the delivery catheter.

75. (New) A method in accordance with Claim 74, further comprising proximally retracting the control head and the pledget pusher relative to the delivery cannula, the control head being retracted through the pledget, the delivery cannula distal end engaging the pledget.

76. (New) A method in accordance with Claim 75, wherein the expelling step further comprises the step of distally advancing the pledget pusher to compress the pledget.

77. (New) A method in accordance with Claim 65, wherein the step of advancing the control tip and the step of advancing the assembly are performed simultaneously.

78. (New) A fluid handling tube, comprising
a proximal end and a distal end;
a lumen extending between said proximal end and said distal end; and
at least one fluid port near said proximal end for fluids to exit out of said lumen.

79. (New) The fluid handling tube of claim 78 further comprising an enlarged portion at said proximal end to assist in conducting fluid through said fluid handling tube.

80. (New) The fluid handling tube of claim 79 wherein said enlarged portion has a larger diameter than said lumen.

81. (New) The fluid handling tube of claim 78 further comprising a control head to be received in said lumen.

91 82. (New) The fluid handling tube of claim 81 wherein said lumen is as long as said control head, wherein a distal port of said control head is covered by said lumen such that fluids will not enter said distal port.

